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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/392,018	09/08/99	MADOFF	P 10575/004001

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EXAMINER	
THOMPSON JR, F	
ART UNIT	**PAPER NUMBER**
2165	7

DATE MAILED: 04/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/392,018	Applicant(s) MADOFF et al.
	Examiner Forest Thompson Jr.	Group Art Unit 2165

☒ Responsive to communication(s) filed on 2/26/01

☒ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-31 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-31 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

DETAILED ACTION

Response to Amendment

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action (See Paper No. 4). The text of those sections of Title 35, U.S. Code not otherwise provided in a prior Office action will be included in this action where appropriate.

2. This action is responsive to the amendment (amendment A) filed 25 January 2001 (see Paper #6). Amendment A amended claims 1 and 5, and added new claims 26-31. **Claims 1-31 are pending.**

3. **Claims 1-31 have been examined.**

Double Patenting

4. Claims 27, 29 and 31 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 26, 28 and 30. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

5. Applicant is advised that should claims 26, 28 and 30 be found allowable, claims 27, 29 and 31 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

6. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claim Rejections - 35 USC § 112

7. Claim 5 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant's amendment to claim 5 clarifies the claim language. Examiner withdraws the rejection.

Claim Rejections - 35 USC § 102

8. Claims 1-4 and 6-25 were rejected under 35 U.S.C. 102(e) as being anticipated by **Ferstenberg et al.** (U.S. Patent No. 5,893,071) in Paper #4. Applicant's amendment to the claim language does not overcome the rejection. The rejections of Paper #4 are maintained. However, new art was identified by examiner for completeness.

9. Claims 1 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by **Richard et al.** (U.S. Patent No. 6,016,483), **and separately by** Chan, K.C.; Christie, William G.; Schultz, Paul H.; "Market structure and the intraday pattern of bid-ask spreads for NASDAQ securities;" Journal of Business, vol. 68, n1, pg. 35(26), 07666891; January 1995 (hereafter referred to as **Chan et al.**). Each reference anticipates claims 1 and 11. **Chan et al.** does not explicitly identify the use of computers, workstations nor servers as used in the art, as per claim 21.

10. As per claim 1, **Richard et al.** discloses:

- receiving orders from customers for the product (col. 8 lines 6-34);
- determining an imbalance condition between received buy orders and received sell orders for the product (col. 9 lines 3-21); and
- posting an allocation message to market maker participants to communicate an expected allocation of the imbalance for execution at an initial opening of the market on the side of the imbalance in the event that the imbalance exists at the opening (col. 6 lines 46-60).

Additionally, **Chan et al.** illustrates aspects of claim 1 of the claimed invention by disclosing:

- receiving orders from customers for the product (pg. 3, last para. - pg. 4 para. 2);
- determining an imbalance condition between received buy orders and received sell orders for the product(pg. 4 para. 2); and
- posting an allocation message to market maker participants to communicate an expected allocation of the imbalance for execution at an initial opening of the market on the side of the imbalance in the event that the imbalance exists at the opening (pg. 3, last para. - pg. 4 para. 2; pg. 4 para. 4).

Claim 11 is written as a computer program product and contains the same limitations as claim 1; therefore, the same rejection is applied;

6-9 16-19 25

11. Claims 2-5, 10, 12-15, 20-24, and 26-31 are rejected under 35 U.S.C. 102(e) as being anticipated by **Richard et al.** (U.S. Patent No. 6,016,483).

As per claim 2, **Richard et al.** discloses the orders are orders at a market price and are orders for customer accounts (col. 9 lines 15-25).

As per claim 3, **Richard et al.** discloses disseminating a message that indicates a current imbalance between buy and sell orders (col. 8 line 67; col. 9 lines 1-14).

As per claim 4, **Richard et al.** discloses the products are financial instruments (col. 2 lines 63-66; col. 3 lines 62-67; col. 4 line 1).

As per claim 5, **Richard et al.** discloses:

- disseminating a message that indicates a current imbalance between buy and sell orders for the product (col. 6 lines 46-60); and
- wherein determining an imbalance condition, posting an allocation message to market participants, and disseminating an imbalance message over regular periods of time occur between the initial reception of orders and actual opening of the trading system (col. 6 lines 32-60).

As per claim 10, **Richard et al.** discloses the orders are limit orders and wherein marketable ones of those limit orders are applied to reduce the imbalance (col. 6 lines 42-60; col. 10 line 40 - col. 11 line 16).

Claim 12 is written as a computer program product and contains the same limitations as claim 2; therefore, the same rejection is applied;

Claim 13 is written as a computer program product and contains the same limitations as claim 3; therefore, the same rejection is applied;

Claim 14 is written as a computer program product and contains the same limitations as claim 4; therefore, the same rejection is applied;

Claim 15 is written as a computer program product and contains the same limitations as claim 5; therefore, the same rejection is applied;

As per claim 20, **Richard et al.** discloses instructions that cause the computer to execute the entire amount of accumulated shares as a single block at one price (col. 9 lines 33-54).

As per claim 21, **Richard et al.** discloses:

- a plurality of workstations for entering orders (col. 8 lines 10-65);
- a server computer (col. 8 lines 9-10), as a central controller;
- receive orders for a product (col. 8 lines 6-34);
- determine an imbalance condition between received buy orders and received sell orders (col. 9 lines 3-21); and
- post an allocation message to market maker participants to communicate an expected allocation of the imbalance for execution at an initial opening of the market in the event that the imbalance exists at the opening (col. 6 lines 46-60).

As per claim 22, **Richard et al.** discloses the computer program product further comprises instructions for causing the server to receive limit orders for the product (col. 3 lines 51-67; col. 4 lines 1-3; col. 8 lines 6-34; col. 12 lines 51-57).

Claim 23 is written as a computer program product and contains the same limitations as claim 3; therefore, the same rejection is applied.

Claim 24 is written as a computer program product and contains the same limitations as claim 4; therefore, the same rejection is applied.

As per claim 26, **Richard et al.** discloses disseminating a message that indicates a current imbalance between buy and sell orders for the product is a publicly disseminated message (col. 11 lines 19-25).

Claim 27 is written as a computer program product and contains the same limitations as claim 26; therefore, the same rejection is applied.

As per claim 28, **Richard et al.** discloses instructions to disseminate a message that indicates a current imbalance between buy and sell orders for the product is a publicly disseminated message (col. 11 lines 19-25).

Claim 29 is written as a computer program product and contains the same limitations as claim 28; therefore, the same rejection is applied.

As per claim 30, **Richard et al.** discloses disseminating a message that indicates a current imbalance between buy and sell orders for the product is a publicly disseminated message (col. 11 lines 19-25).

Claim 31 is written as a computer program product and contains the same limitations as claim 30; therefore, the same rejection is applied.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 6-9, 16-19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Richard et al.** (U.S. Patent No. 6,016,483), and further in view of Chan, K.C.; Christie, William G.; Schultz, Paul H.; "Market structure and the intraday pattern of bid-ask spreads for NASDAQ securities;" Journal of Business, vol. 68, n1, pg. 35(26), 07666891; January 1995 (hereafter referred to as **Chan et al.**).

As per claim 6, neither **Richard et al.** nor **Chan et al.** disclose establishing a lock-in period. However, Official Notice is taken that establishing a lock-in period (e.g., a period of time when an option is open or available and may be selected, accepted and obligated) is old and well known to one skilled in the art at the time the invention was made. This concept is used in the stock market as well as other areas of the business world in the conduct of business. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine old and well known art with **Richard et al.** and **Chan et al.** to disclose establishing a lock-in period, because this facilitates the conduct of business in a timely manner.

As per claims 7-9, **Richard et al.** does not specifically disclose applying received predefined relative indications to an imbalance that exists subsequent to establishing the lock-in period; allocating the remaining imbalance amongst market makers after applying predefined relative indications to eliminate the imbalance; nor determining an opening price based on allocated imbalance amongst the market participants and applied predefined relative indications. However, **Chan et al.** discloses:

- applying received predefined relative indications to an imbalance that exists subsequent to establishing the lock-in period (pg. 1 para.3);
- allocating the remaining imbalance amongst market makers after applying predefined relative indications to eliminate the imbalance (pg. 1 para.3); and
- determining an opening price based on allocated imbalance amongst the market participants and applied predefined relative indications (pg. 1 para.4).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine old and well known art with **Richard et al.** and **Chan et al.** to disclose establishing a lock-in period, applying received predefined relative indications to an imbalance that exists subsequent to establishing the lock-in period, allocating the remaining imbalance amongst market makers after applying predefined relative indications to eliminate the imbalance, and determining an opening price based on allocated imbalance amongst the market participants and applied predefined relative indications, because this facilitates the conduct of business in a timely manner.

Claim 16 is written as a computer program product and contains the same limitations as claim 6; therefore, the same rejection is applied;

Claim 17 is written as a computer program product and contains the same limitations as claim 7; therefore, the same rejection is applied;

As per claim 18, **Richard et al.** does not disclose accept limit orders nor allocating the remaining imbalance amongst market makers after applying predefined relative indications to eliminate the imbalance. However, **Chan et al.** discloses:

- accept limit orders (pg. 2-3, para. I.); and
- allocating the remaining imbalance amongst market makers after applying predefined relative indications to eliminate the imbalance (pg. 1 para.3).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine **Richard et al.** and **Chan et al.** to disclose accept limit orders and allocating the remaining imbalance amongst market makers after applying predefined relative indications to eliminate the imbalance, because this enhances the capability of the user to determine an opening price for a product.

As per claim 19, **Richard et al.** discloses instructions that cause the computer to determine an opening price based on first free and open quote and whether there is still an imbalance (Abstract; col. 9 lines 33-54).

Claim 25 is written as a computer program product and contains the same limitations as claim 18; therefore, the same rejection is applied.

Response to Arguments

14. Applicant's arguments filed 26 February 2001 have been fully considered but they are not persuasive. Additionally, other prior art has been applied to reject the claimed invention in the paragraphs above. Examiner has provided comments pertaining to applicant's argument relative to **Ferstenberg**, for completeness.

In pg. 3 para. 6, applicant argues that claim 1 recites *receiving orders from customers*, and thus, is patently distinct over **Ferstenberg.** Examiner disagrees. Examiner points out that **Ferstenberg** discloses: *This invention provides a computer system (a computer-based machine including hardware and software) for intermediated exchange that is capable of facilitating exchanges of multiple commodities for multiple participants according to their goals. In the preferred implementation the computer system of this invention is used for the exchange of financial commodities according to mean-variance portfolio goals and related portfolio constraints. In the preferred implementation, participants can include investors and investing entities. A single participant can appear in an intermediated exchange single or multiple times. In the latter case, each appearance of a participant can be governed by the same or different objectives* (col. 2 line 59 - col. 3 line 4). The phrases *A single participant* and *participants can*

include investors and investing entities indicate that investors are participants, by which examiner interprets *investors* to mean individual customers.

In pg. 3 para. 6, applicant argues that *claim 1 is directed to a method of determining an opening price for a product at an initial opening of trading in the trading system.* Examiner states that **Ferstenberg** discloses: *Based on the information provided by the opening messages, at step 12, the intermediary generates initial offer messages listing commodities offered and sends them to the e-agents. Because the e-agents collectively may seek to purchase more units of a commodity than they seek to sell, or vice versa, the intermediary's initial offer for each commodity allocates the total quantity offered by all the e-agents among all the e-agents interested in buying or selling* (col. 18 lines 30-37).

In pg. 3 para. 6-7, applicant argues : *Claim 1 recites posting an allocation message to market maker participants to communicate an expected allocation of the imbalance for execution at an initial opening of a market in event that an imbalance exists at the opening. This action of posting an allocation is neither described the suggested by the reference.* Examiner disagrees. **Ferstenberg** states *Instinet (Reuters, New York, N.Y.) began offering partially automated intermediary services by providing a computer network through which their security trading interests and subsequently can negotiate trades using standardized messages made available by the network* (col. 1 lines 55-60).

Additionally, in the paper "Q&A," Primex Trading, 2000, is the quote, at pg. 3, last paragraph: *With respect to exchange-listed stocks, the system does accomplish much of what a physical exchange floor seeks to accomplish, albeit in a more comprehensive, automated fashion.* Examiner points out that automation of a manual process is not patentable in the art.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Forest Thompson whose telephone number is (703) 306-5449. The examiner can normally be reached Monday-Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin, can be reached at (703) 308-1065.

The fax number for faxes to Technology Center 2100 is (703) 308-9051 or 9052..

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

April 3, 2001 /FOT

VINCENT MILLIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100